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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,352	01/24/2002	Gregory Mathus	5043CON	8045

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Samuels, Gauthier & Stevens, LLP
225 Franklin Street, Suite 3300
Boston, MA 02110

EXAMINER

KOYAMA, KUMIKO C

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,352

Applicant(s)

MATHUS ET AL.

Examiner

Kumiko C. Koyama

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 22-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 22-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Acknowledgment is made of receipt of the Appeal Brief filed on May 29, 2003.

Currently, claims 22-36 are pending in this application.

2. After careful consideration of the Applicant's argument, the examiner now sets forth a non-obviousness type double patenting against claims 22-36. Furthermore, the examiner has provided an additional explanations and reasons/motivation in this Office Action to further clarify the issues in the claims 22-36. Accordingly, prosecution is hereby reopened.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 22-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijnschenk et al (US 6,270,728) in view of Moh et al (US 6,165,594).

Wijnschenk shows a test tube (FIG 1) comprising an enclosed sidewall 2 and an integral bottom surface 6 that together define a tubular container 1 having an open top 20, wherein the bottom surface has a concave interior surface 3 and a planar exterior surface 7 upon which machine readable coding 9 is encoded on a label, having a light-coloured background on which a contrasting pattern of dots (col 1 lines 59-65) is printed, deposited onto the planar exterior surface 7 to uniquely identify the test tube (col 1 lines 20-22). Wijnschenk also teaches that the

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machine readable coding is applied to an optically opaque background to ensure the machine readable coding is readable at all times with an optical reading mechanism (col 1 lines 66+).

Re claims 22, and 29: Wijnschenk fails to teach that the machine readable coding is encoded within a multi-layered opaque coatings of contrasting colors.

Moh teaches a machine readable label (col 1 lines 19-23) having a multilayered construction (col 3 lines 16-17), where a top layer of one color overlies a layer of a contrasting color (col 2 lines 58-59). Moh discloses that the label is attached to identify and track a product (col 2 lines 67+) made out of a substrate 12, which includes glass (col 5 lines 43-44).

Re claims 23, 25, 27 and 30: Moh shows a label 10, which includes base layer 14 and top layer 16, attached to a substrate 12 (FIG 1, col 5 lines 32-33). Moh teaches a formation of a code pattern by removing portions of the top layer 16 to expose the underlying base layer 14, so that the code is optically discernible (col 7 lines 12-20). Moh also teaches that layer 14 and layer 16 are contrasting colors (col 7 lines 13-15), and that layer 14 is white and layer 16 is black (col 7 lines 26-27).

Re claim 24, 26 and 32: Moh teaches that selected portions of the second layer are removed by exposure to laser ablating techniques (col 8 lines 9-15).

Re claim 28: Moh teaches that the label may comprise metal (col 2 lines 4-12).

Re claim 31: Moh teaches that the label may comprise metal (col 2 lines 4-12). Although Moh does not disclose the exact word "hot stamping," he discloses that for forming a multilayer label, layers may be stacked and laminated together using appropriate pressure and temperature (col 16 lines 1-2).

In view of Moh's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate Moh's label to the teachings of Wijnschenk and create a multilayered opaque coatings of contrasting colors because it would have resulted in more distinct color contrast of the coding and distinctive opaqueness of the background, therefore resulting in reducing the error rate in reading the code.

2. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijnschenk as modified by Moh as applied to claim 24 and 32 above, and further in view of Mizobuchi et al (US 6,133,342). Wijnschenk as modified by Moh have been discussed above.

Wijnschenk as modified by Moh fail to teach that the opaque coating undergoes a change in color when exposed to the coherent light source, includes a light sensitive pigment that undergoes the change in color, and the change in color is effected by altering the color of the light sensitive pigment included in the opaque coating.

Mizobuchi discloses an opaque coating composition comprising a colorant (col 2 lines 57-60) and a substrate is coated with the composition (col 2 lines 45-46). Mizobuchi further discloses that upon irradiating the substrate with a laser beam according to the predetermined marking pattern, the polymeric material becomes translucent or transparent, and as a result, the colorant is made visible. The visible mark is created on the substrate (col 2 lines 47-53). The colorant comprises a pigment and may be in different colors, such as blue, red, or yellow (col 10 lines 1-2 and 44-45, col 12 line 9).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Mizobuchi to the teachings of Wijnschenk as modified by Moh because the modification provides the code marking with more variety of

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colors, which is easily visible and recognizable by human eye. Such modification also helps place the test tube in a correct category or location by using the color differences in order to prevent the test tube from getting lost within a lab.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 22-36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6 of U.S. Patent No. 6,372,293 (herein after '293 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claimed invention is a broader recitation of the '293 patent.

Re claim 22 of the present claimed invention: Claim 22 of the present claimed invention recites "a test tube, comprising: a tube body of unitary construction comprising an enclosed sidewall and an integral bottom that together define a tubular container having an open top, wherein said bottom has an exterior surface upon which machine readable data is encoded within an opaque coating deposited onto said exterior surface to uniquely identify said test tube."

Re claim 1 of the '293 patent: Claim 1 of the '293 patent recites "a test tube, comprising: a tube body of unitary construction comprising an enclosed sidewall and an integral bottom that together define a tubular container having an open top, wherein said bottom has a concave interior surface and a planar exterior surface upon which machine readable data is encoded within multi-layered opaque coatings of contrasting colors that are deposited onto said planar exterior surface to uniquely identify said test tube."

Claim 1 of the '293 patent includes all the elements and limitations of claim 22 of the present claimed invention, and further includes additional limitations. Therefore, claim 22 of the present claimed invention is a broader recitation of the '293 patent.

Re claim 29 of the present claimed invention: Claim 29 of the present claimed invention recites "a method of manufacturing a test tube, comprising the steps of: providing a tube body of unitary construction comprising an enclosed sidewall with an open top and an integral bottom with an exterior surface; applying an opaque coating to said exterior surface; and encoding machine readable data within said opaque coating."

Re claim 6 of the '293 patent: Claim 6 of the '293 patent recites "a method of manufacturing a test tube, comprising the steps of: providing a tube body of unitary construction comprising an enclosed sidewall of and an integral bottom that together define a tubular container having an open top, wherein said bottom has a concave interior surface and a planar exterior surface; depositing a multi-layered opaque coating onto the planar exterior surface to provide a data matrix code that uniquely identifies the test tube, wherein said step of depositing comprises the steps of (i) depositing a first layer of opaque material onto the planar exterior surface; (ii) depositing a second layer of opaque material onto the first layer, wherein the first

layer and the second layer are contrasting colors; and (iii) removing portions of the second layer to define the data matrix code.”

Claim 6 of the ‘293 patent includes all the elements and limitations of claim 29 of the present claimed invention, and further includes additional limitations. Therefore, claim 29 of the present claimed invention is a broader recitation of the ‘293 patent.

Response to Arguments

5. Appellant’s arguments filed on May 29, 2003 have been fully considered but they are not persuasive.

The examiner notes that this present application is a continuation of U.S. Patent Application No. 09/399,405, and not U.S. Patent Application No. 09/399,404 as indicated by the Appellant in the Appeal Brief.

In response to Appellant’s argument regarding “neither Wijnschenk et al. or Moh et al., either when viewed singly, or in combination, disclose or suggest the unitary test tube concept claimed in 22,” the examiner respectfully disagrees. With the provided claim by the Appellant, the examiner interprets “a tube body of unitary construction” as a tube with elements, and such elements are collected and united as one to form or construct the claimed tube. According to the claim and the examiner’s interpretation, the elements are an enclosed sidewall, an integral bottom with an exterior surface having an opaque coated machine readable data, and an opening.

Wijnschenk teaches the specifics of the tube. Wijnschenk teaches a test tube defined as a tubular container, which is considered to be an enclosed sidewall united with an integral bottom and an opening. The tubular container is provided with an optically readable coding including a

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dot matrix applied to an optically opaque surface. Wijnschenk is combined with Moh in order to provide further explanations and details of the machine readable code. The details of the combination and its motivations of Wijnschenk in view of Moh are given in Paper No. 9.

The examiner submits that U.S. Patent Application No. 09/399,405 was allowed and now patented as U.S. Patent No. 6,372,293 (herein after '293 patent) because the prior art does not teach all of the limitations and the claimed invention. However, the present applications does not include all the limitations presented in the '293 patent and the present claimed invention is broader than the claims included in the '293 patent, as confirmed by the Appellant in the Appeal Brief. For example, claim 1 of the '293 patent further includes such limitations as "...said bottom has a concave interior surface and a planar exterior surface...multi-layered opaque coatings of contrasting colors..." The '293 patent was patented because the claim were examined as a whole, having a tube body of "unitary construction" also including the specific limitations given above. Although the same language "unitary construction" is used, the definition of "unitary construction" in claim 22 of the present claimed invention differs from that of '293 patent due to the fact that these specific limitations or further new limitations were not included. Without such limitations, Wijnschenk and Moh references read on the present claimed invention, and therefore, the present claimed invention is not patentable. Claim 29 has been rejected on the same basis as discussed above.

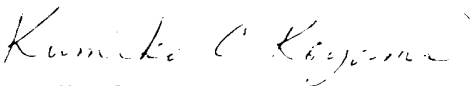
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kumiko C. Koyama whose telephone number is 703-305-5425. The examiner can normally be reached on Monday-Friday 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Kumiko C. Koyama
June 17, 2003


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800